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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,420	01/18/2002	John P. Hunter JR.	HUNTER	4104
4988	7590	10/07/2003	PRODUCT-DIVISIONAL	
ALFRED M. WALKER 225 OLD COUNTRY ROAD MELVILLE, NY 11747-2712			EXAMINER YAO, SAMCHUAN CUA	
			ART UNIT	PAPER NUMBER
			1733	

DATE MAILED: 10/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/052,420

Applicant(s)

HUNTER, JOHN P.

Examiner

Sam Chuan C. Yao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 42-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 42-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 42-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2,055,326 A.

GB '326, drawn to a roofing foam board, substantially discloses the combination of foam roof membrane and a building roof base recited in claim 42 (page 1 lines 25-52; figures 1-2). GB '326 differs from claim 42 in that, the limitation "*said foam surface membrane layer being spontaneously cured and directly applied integrally to said building roof base*" is taken to define over a preformed roofing foam board being mechanically secured onto a roof surface as taught by GB '326. However, this limitation fails to define over a resultant structural article where the article is formed by adhesively bonding a preformed polyurethane foam roofing board on a section of a whole roof surface, because: a) "*Even though product-by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production.*" MPEP 2113; and b) according to Webster's New Collegiate Dictionary, the term integral is defined to be "*1. Essential to completeness; integrant; as an integral part. 2. Composed of*

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*constituent parts making a whole; composite as, an integral whole.* It is quite clear that, after a preformed polyurethane foam roofing board is adhesively bonded on a roofing surface, the roofing board becomes an integral component of a roof.

GB '326 does not teach directly and integrally securing a preformed roofing foam board onto a roofing surface by adhesively bonding them together. However, it would have been obvious in the art to directly and integrally secure a preformed roofing foam board onto a roofing surface by adhesively bonding them together, because it is a common practice in the art to directly apply a board onto a roofing surface by either mechanical means or adhesive means thereby the board becomes an integral part of the roofing surface.

With respect to claims 43-44, reinforcing netting which is made of thermoplastic fabric is notoriously well known in the art.

With respect to claim 45, see page 1 lines 43-48.

With respect to claim 46, see figures 1-2 and page 1 lines 20-25.

3. Claims 42-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marchais et al (US 4,558,550).

Marchais et al, drawn to a insulating foam roofing covering, substantially discloses the recited combination in claims 42-43 and 45. Marchais et al differs from the these claims in that, Marchais et al is silent on the material used in forming a foam covering. However, such would have been obvious in the art as such is notoriously well known in the roofing covering art. See for instance numbered paragraphs 2 or 4.

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With respect to claim 44, it is conventional in the art to embed a reinforcing thermoplastic mesh into a foam layer.

With respect to claim 46, it is conventional in the art to provide an impervious layer onto a foam roofing sheet to protect the foam sheet from adverse environmental conditions such as rain, snow, etc.

4. Claims 42-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hooker (US 4,087,296) in view of GB 2,055,326 and Marchais et al (US 4,558,550).

Hooker discloses a process of applying a membrane covered polyurethane foam onto a roofing surface, the process comprises spraying a foamable polyurethane onto a roofing surface, applying a fiberglass web/mat membrane on the foamable polyurethane; and, curing the foamable polyurethane to integrally bond all layers together (abstract; col. 2 lines 18-55; figures 1-2).

Hooker does not teach embedding a reinforcing mesh to a foam polyurethane roofing sheet. However, it would have been obvious in the art to embed a mesh to a polyurethane foam in the process taught by Hooker, because GB '326 and Marchais et al teach the desirability of forming a roof foam covering, where a reinforcing mesh is embedded in the foam covering. One in the art, wanting to form a membrane covered polyurethane with a reinforcing mesh embedded in it, would have reasonably recognized and appreciated that, all that would have been needed is to simply apply two coatings of polyurethane foam using the process of Hooker. For instance, one in the art could have performed the following sequence of steps: a) apply a reinforcing mesh and a polyurethane

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foam on a roofing surface using a process of Hooker illustrated in figure 2, and then after some curing of the polyurethane foam, b) apply a membrane and polyurethane onto the mesh covered polyurethane foam using the process taught by Hooker.

**Alternatively**, one in the art would have readily recognized and appreciated that, one could also effectively provide a reinforcing mesh similar to the one taught by Marchais et al in the process of Hooker by simply layering reinforcing meshes on a roofing surface and then applying a membrane and polyurethane onto the meshes using the process taught by Hooker.

With respect to claims 42-46, these claims would have been obvious in the art for essentially the same reasons set forth above.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Renumbered claim 47 (i.e. originally claim 49) is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

This claim is indefinite, because it is dependent on a canceled claim. No attempt was made to make an art rejection on this claim, because it is totally unclear what the scope of this claim.

The lack of a prior art rejection should not be construed as meaning that the claims would be patentable if corrected to overcome the 35 USC 112 rejection set forth above. No prior art rejection has been made since it would be improper

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to rely on speculative assumptions as to the meaning of the claims in this application.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (703) 308-4788. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W Ball can be reached on (703) 308-2058. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.



Sam Chuan C. Yao  
Primary Examiner  
Art Unit 1733

Scy  
09-29-03